

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (previously presented) A method for laser machining a coated sheet, comprising:

placing a coated sheet having first and second surfaces near a laser such that one surface of the sheet faces the laser and the other surface of the sheet faces away from the laser; and

generating on the surface of the coated sheet which faces away from said laser at least one topographical change protruding from the surface by directing the laser beam onto the sheet and guiding the laser beam to describe an inward narrowing spiral, whereby the laser beam generates the at least one topographical change protruding from

the surface of the sheet which faces away from said beam, by melting through this sheet, and

wherein the topographical change protrudes from the surface a height sufficient to provide a spacing gap between the coated surface on which the topographical change was formed and a sheet to which the coated sheet is to be welded sufficient to permit vaporization products formed in the welding process to escape through the at least one gap.

2. (previously presented) The method as claimed in claim 1, wherein the laser beam is a focused laser beam having a focus and a focal area at said focus, and wherein the focus of the laser beam focus is situated at such a distance from the surface of the sheet to be machined that the irradiation area of the laser on the surface exceeds the focal area thereof by at least 50 percent.

3. (currently amended) A method for laser machining a coated sheet, comprising:

placing a coated sheet having first and second surfaces near a laser such that one surface of the sheet faces the laser and the other surface of the sheet faces away from the laser; and

generating on at least one coated surface of the coated sheet at least one topographical change protruding from the surface by directing the laser beam onto the sheet and guiding the laser beam to describe ~~[[a]]~~ an inward narrowing spiral, whereby the laser beam generates the

at least one topographical change protruding from the surface of the sheet which faces away from said beam, by melting through this sheet;

bringing at least one further sheet into contact with the sheet formed in (a) or (b) in such a way that the at least one protruding topographical change causes the formation of at least one gap between the coated sheet and the at least one further sheet, and

welding the coated sheet and the at least one further sheet together in the region of the at least one gap in such a way that vaporization products formed in the process escape through the at least one gap.

4. (previously presented) The method as claimed in claim 3, wherein the at least two sheets are welded together to form a weld seam, and wherein said weld seam at least partially replaces the at least one topographical change previously generated.

5. (previously presented) The method as in claim 1, wherein the surface from which said least one topographical change protrudes is the laser beam facing surface.

6. (previously presented) The method as in claim 1, wherein the surface from which said least one topographical change protrudes is the surface of the sheet which faces away from the laser beam.

7. (previously presented) The method as in claim 1, further comprising:
controlling said melting through by
(a) pre-specifying the laser processing time or
(b) providing a penetration sensor which senses the formation of the protrusion and regulates the machining time of the laser in response to the detection of the protrusion.

8. (cancelled).

9. (cancelled).

10. (previously presented) The method as in claim 7, wherein prior to formation of said topographical changes two sheets are aligned to each other for welding, the alignment being

without contact pressure, and wherein after alignment said topographical changes are introduced through at least one sheet, said method further comprising the subsequent steps of:

pressing the aligned sheets together, and
welding the aligned and pressed sheets together.

11. (currently amended) A method for laser machining a coated sheet, comprising:

placing a coated sheet having first and second surfaces near a laser such that one surface of the sheet faces the laser and the other surface of the sheet faces away from the laser; and

generating on the laser beam facing coated surface of the coated sheet at least one topographical change protruding from the surface by directing the laser beam onto the sheet and guiding the laser beam to describe [[a]] an inward narrowing spiral, whereby the laser beam generates the at least one topographical change, and

wherein the topographical change protrudes from the surface a height sufficient to provide a spacing gap between the coated surface on which the topographical change was formed and a sheet to which the coated sheet is to be welded sufficient to permit vaporization products formed in the welding process to escape through the at least one gap.